## ECONOMIC PROFILE OF SNAKE RIVER FISHERIES

The Federal Energy Regulatory Commission (FERC) license to operate the Hell's Canyon Complex (HCC), comprised of Brownlee, Oxbow, and Hell's Canyon Dams, appurtenant reservoirs and related features and affected upstream and downstream reaches of the Snake River and its tributaries will expire on July 31, 2005. A new license application is now being prepared by Idaho Power Company (IPC.

Historically, the Hell's Canyon fishery was composed primarily of coldwater anadromous and resident fishery stocks. These included pacific lamprey, fall and spring/summer chinook salmon, steelhead and sockeye salmon downstream of the Snake and Salmon River confluence. Native resident species of concern include bull trout, redband trout and white sturgeon. Following construction of the HCC, the anadromous fishery was largely supplanted by a mixed warm water resident fishery. All salmon and steelhead stocks have been extirpated from the reach upstream of the HCC because of the failure of passage facilities at there structures. As a result of this and other environmental perturbations and human caused losses, all the extant anadromous fish populations in the Snake River basin are presently listed pursuant to the Endangered Species Act. Resident bull trout are also listed as threatened in the Hells Canyon area. Commercial fishing for anadromous species has been eliminated from the Snake River and most of the Columbia River basin downstream. Current recreational fishing use consists mostly of angling on project reservoirs for introduced warm or cool water fisheries, as well as private and guided fishing in the river reaches upstream and downstream for white sturgeon on a catch and release basis. Although in aggregate, recreational fishing use, the economic value of this use and the associated regional economic impacts are thought to be quite large, they have never been quantified. Additionally, judging by the results of other studies of nationally significant resources, the nonuse or passive use value of HCC fisheries resources may also be substantial.

The objectives of this proposed study are (1) to document the type, extent and location of recreational fishing use, (2) to document the type, extent and location of commercial fishing use, (3) to obtain existing estimates of the economic value of such uses, (4) to obtain existing estimates of the regional economic impact of these uses, and, (5) to identify and obtain existing studies of nonuse or passive use economic value which may be applicable to this effort. If judged to be feasible and defensible, these data may later be used for benefits transfer purposes (see: *Water Resources Research* Vol 28 No. 3 March 1992) or may serve as a basis for subsequent primary site specific studies.

Use appropriate techniques to obtain the following for the years 1963 (or before) through the present:

- 1. Recreational fishing use data by activity and location
- 2. Commercial fishing used data by activity and location

- 3. Existing site specific and/or representative estimates of the economic use value of these activities for the time periods available.
- 4. Existing site specific and/or representative estimates of the regional economic impact of these activities for the time periods available.
- 5. Identify and obtain studies of nonuse or passive use value pertinent to HCC fishery resources. Provide professional opinions as to the applicability of these studies for the HCC relicensing effort.